

PROJECT	DESIGNATION
1702940	1702940
CONTRACT	BRIDGE FILE
RS-40592	027-38-06182 C

INDIANA DEPARTMENT OF TRANSPORTATION



STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
027-38-06182 C	Reinforced Concrete Through Arch Bridge	1 Clear Span: 110'-2" Skew: 0°	Salamonie River	53+58.62 Line "A"

KIN PROJECT INFORMATION	
DESIGNATION	PROJECT DESCRIPTION
1700811 (LEAD)	US 27 - HMA OVERLAY, PREVENTIVE MAINTENANCE
1800009	US 27 - BIKE/PEDESTRIAN FACILITIES
1700921	US 27 OVER LITTLE SALAMONIE RIVER - BRIDGE DECK OVERLAY
1702940	US 27 OVER SALAMONIE RIVER - BRIDGE THIN DECK OVERLAY

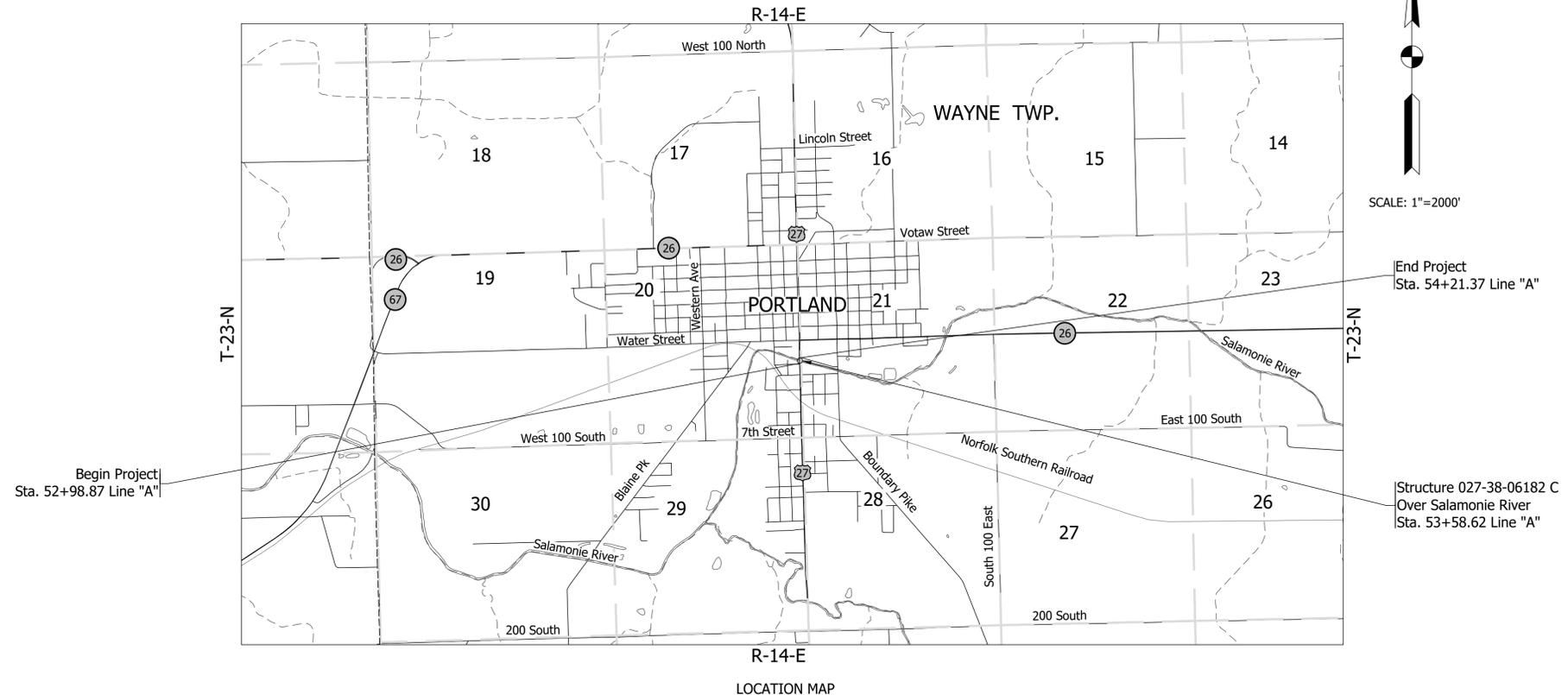
BRIDGE REHABILITATION PLANS FOR SPANS OVER 20 FEET

ROUTE: US 27 AT: RP 64+45

PROJECT NO. 1702940 P.E.
R/W
1702940 CONST.

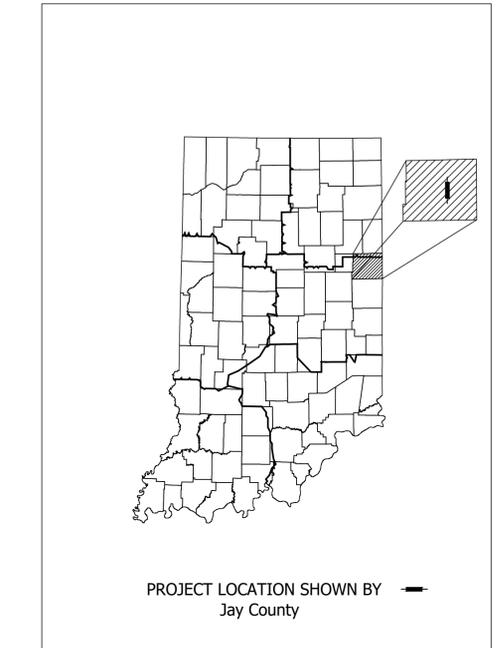
NO ADDITIONAL RIGHT-OF-WAY
REQUIRED FOR THIS PROJECT

BRIDGE THIN DECK OVERLAY PREVENTATIVE MAINTENANCE ON US 27 OVER SALAMONIE RIVER
LOCATED 0.11 MILES SOUTH OF SR 26 IN
SECTION 20 & 21, T23N, R14E, WAYNE TOWNSHIP, JAY COUNTY



TRAFFIC DATA		
A.A.D.T. (2021)		7,439 V.P.D.
A.A.D.T. (2041)		8,839 V.P.D.
D.H.V. (2041)		859 V.P.H.
DIRECTIONAL DISTRIBUTION		49% / 51%
TRUCKS		9.7% A.A.D.T. 8.8% D.H.V.

DESIGN DATA	
DESIGN SPEED	30 M.P.H.
PROJECT DESIGN CRITERIA	3R (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL
RURAL/URBAN	URBAN (INTERMEDIATE)
TERRAIN	LEVEL
ACCESS CONTROL	NONE



LATITUDE: 40° 25' 51" N LONGITUDE: 84° 58' 40" W

BRIDGE LENGTH:	0.023	MI.
ROADWAY LENGTH:	0.000	MI.
TOTAL LENGTH:	0.023	MI.
MAX. GRADE:	0.00	%

HUC 12:	051201020103
HUC 14:	05120102010030

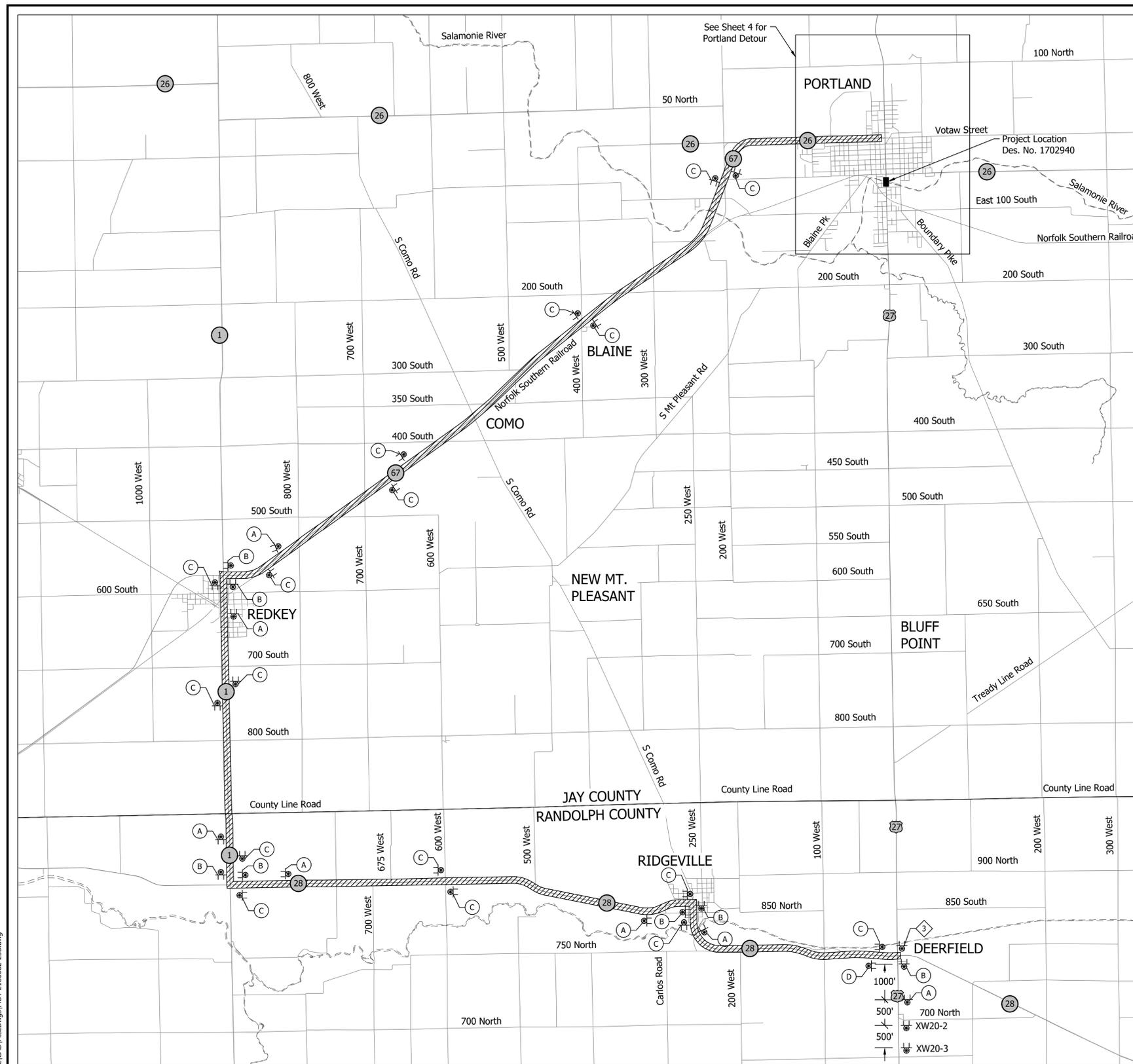
INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2020
TO BE USED WITH THESE PLANS

Date: Apr 20, 2020, 4:46pm User Name: MGreer
File: S:_2018\218-0062\239 Bridge\CAD\MiscDwg\Title 2180062-239.dwg



PLANS PREPARED BY:	LOCHMUELLER GROUP	(574) 334-5460
CERTIFIED BY:		DATE
APPROVED FOR LETTING:	INDIANA DEPARTMENT OF TRANSPORTATION	DATE

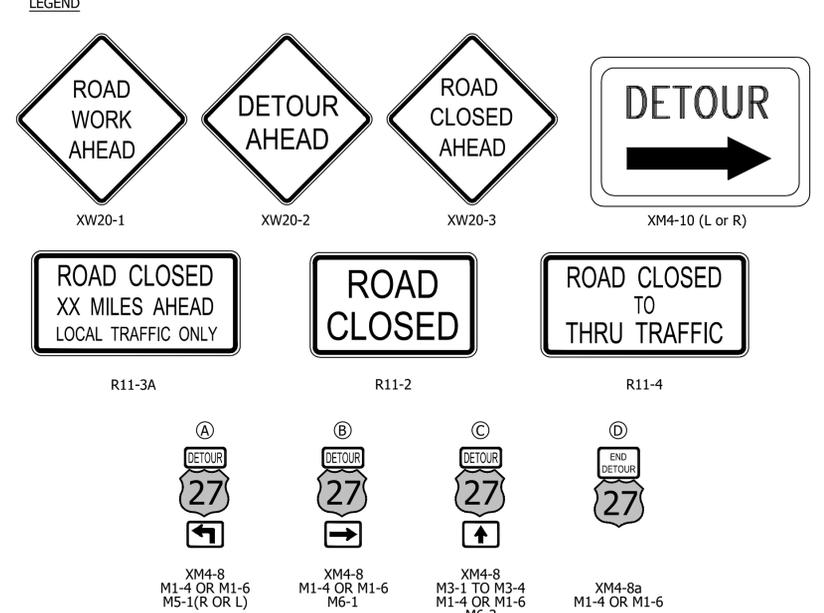
BRIDGE FILE	027-38-06182 C
DESIGNATION	1702940
SURVEY BOOK	N/A
SHEETS	1 of 7
CONTRACT	RS-40592
PROJECT	027-38-06182 C



CONSTRUCTION SIGN SCHEDULE					
SIGN. NO.	DESCRIPTION	SIZE (IN)	TYPE	EST. QTY.	
R11-2	"ROAD CLOSED" SIGN	48 x 30	(1)	0	
R11-4	"ROAD CLOSED TO THRU TRAFFIC" SIGN	60 x 30	(1)	0	
XM4-10(L OR R)	"DETOUR" SIGN	48 x 18	(1)	1	
R11-3A	"ROAD CLOSED XX MILES AHEAD" SIGN	60 x 30	(1)	1	
XW20-1	"ROAD WORK AHEAD" SIGN	48 x 48	A	0	
XW20-2	"DETOUR AHEAD" SIGN	48 x 48	A	1	
XW20-3	"ROAD CLOSED AHEAD" SIGN	48 x 48	A	1	
				TOTAL TYPE "A" SIGNS	2

Detour Route Marker Assemblies: 32 Req'd
 Road Closure Sign Assemblies: 1 Req'd
 Type III-A Barricades: 0 LFT
 Type III-B Barricades: 0 LFT

(1) Included with road closure sign assembly.



- 1 ROAD CLOSURE SIGN ASSEMBLY W/ TYPE III-B BARRICADE (12 LFT) AND R11-4 SIGN
- 2 ROAD CLOSURE SIGN ASSEMBLY W/ TYPE III-A BARRICADE (24 LFT) AND R11-2 SIGN
- 3 ROAD CLOSURE SIGN ASSEMBLY W/ R11-3A SIGN AND XM4-10 (L OR R) SIGN

- GENERAL NOTES**
- All maintenance of traffic devices, signs and pavement markings shall conform to the latest edition of the Indiana MUTCD.
 - See INDOT Std. Drwg. 801-TCDD-01 for sign spacing requirements and additional notes.
 - See INDOT Std. Drwg. 801-TCLG-01 for standard notes.
 - The Road Closure Sign Assembly shall consist of R11-2 or R11-4 and XM4-10(R or L) signs.
 - Type B construction warning lights shall be used with all signs located on barricades. Type A construction warning lights shall be used on all other construction signs.



Date: Apr 20, 2020, 4:49pm, User: Names: NCG
 File: S:_2018\1216-062\238\Redkey\240\Misc\Drawings\MOT_2180062-238.dwg

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
DESIGNED: MDV DRAWN: NCG	CHECKED: BKA CHECKED: JHP		1" = 4,000'	027-38-06182 C
		MAINTENANCE OF TRAFFIC	VERTICAL SCALE	DESIGNATION
			N/A	1702940
			SURVEY BOOK	SHEETS
			N/A	3 of 7
			CONTRACT	PROJECT
			RS-40592	027-38-06182 C

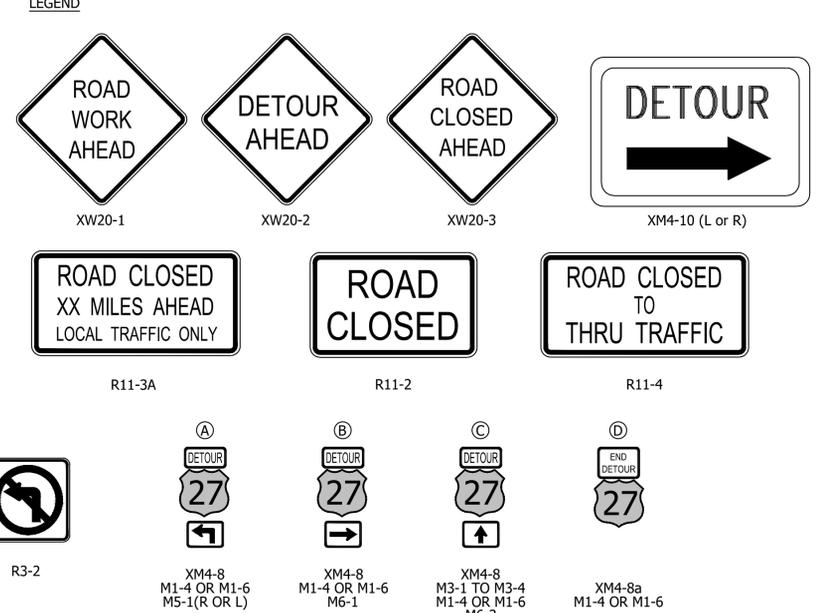
Date: Apr 20, 2020, 4:51pm, User: Names: NCG
 File: S:_2018\1218-062\238\Bridges\CAD\Misc\Drawings\NOT_INSERT_2180062-238.dwg



CONSTRUCTION SIGN SCHEDULE					
SIGN. NO.	DESCRIPTION	SIZE (IN)	TYPE	EST. QTY.	
R11-2	"ROAD CLOSED" SIGN	48 x 30	(1)	2	
R11-4	"ROAD CLOSED TO THRU TRAFFIC" SIGN	60 x 30	(1)	2	
XM4-10(L OR R)	"DETOUR" SIGN	48 x 18	(1)	1	
R11-3A	"ROAD CLOSED XX MILES AHEAD" SIGN	60 x 30	(1)	1	
XW20-1	"ROAD WORK AHEAD" SIGN	48 x 48	A	3	
XW20-2	"DETOUR AHEAD" SIGN	48 x 48	A	1	
XW20-3	"ROAD CLOSED AHEAD" SIGN	48 x 48	A	1	
R3-2	"NO LEFT TURN" SIGN	24 x 24	A	2	
				TOTAL TYPE "A" SIGNS	7

Detour Route Marker Assemblies: 4 Req'd
 Road Closure Sign Assemblies: 5 Req'd
 Type III-A Barricades: 48 LFT
 Type III-B Barricades: 24 LFT

(1) Included with road closure sign assembly.



- 1 ROAD CLOSURE SIGN ASSEMBLY W/ TYPE III-B BARRICADE (12 LFT) AND R11-4 SIGN
- 2 ROAD CLOSURE SIGN ASSEMBLY W/ TYPE III-A BARRICADE (24 LFT) AND R11-2 SIGN
- 3 ROAD CLOSURE SIGN ASSEMBLY W/ R11-3A SIGN AND XM4-10 (L or R) SIGN

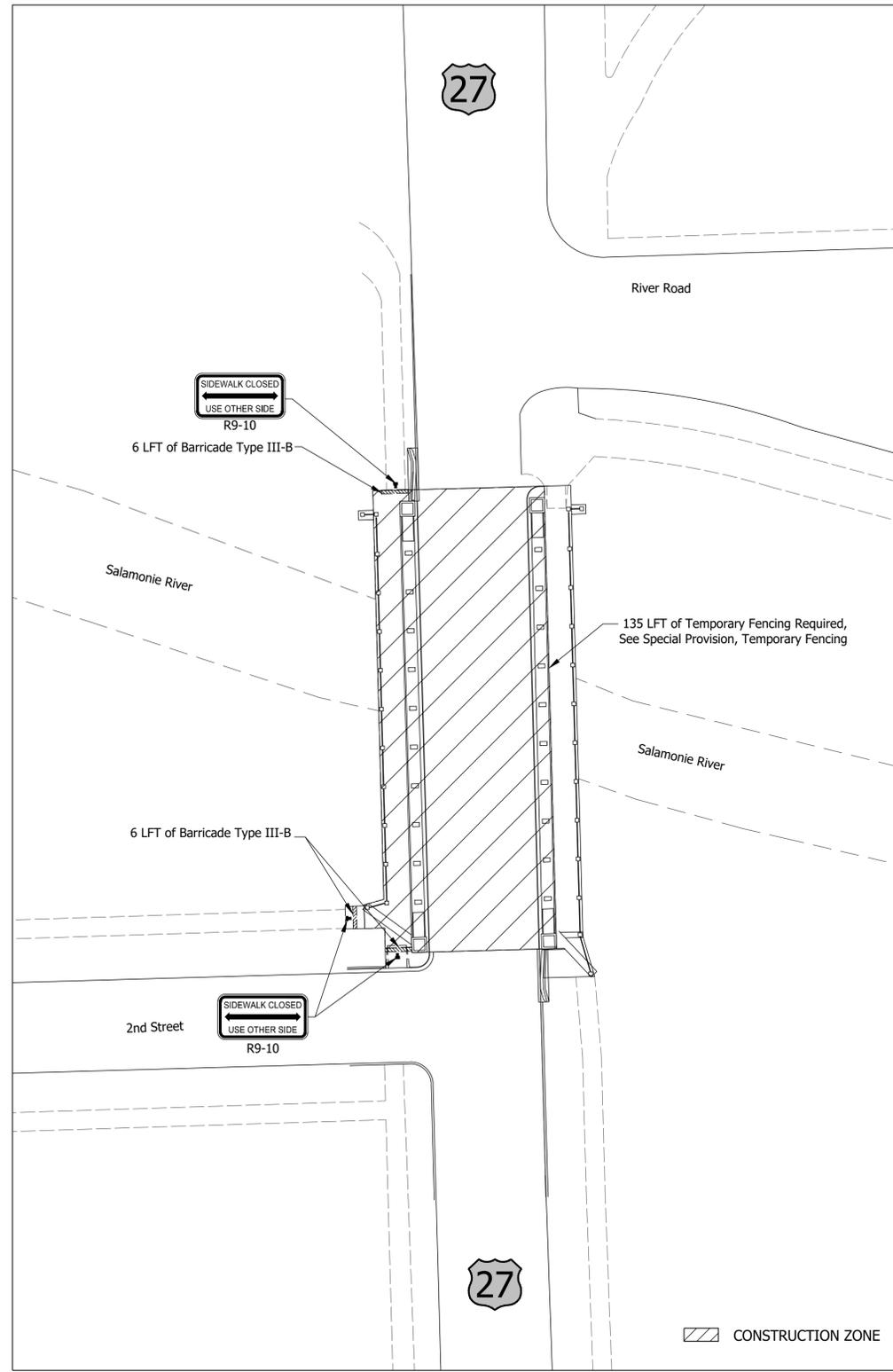
GENERAL NOTES

- 1. All maintenance of traffic devices, signs and pavement markings shall conform to the latest edition of the Indiana MUTCD.
- 2. See INDOT Std. Drwg. 801-TCDT-01 for sign spacing requirements and additional notes.
- 3. See INDOT Std. Drwg. 801-TCLG-01 for standard notes.
- 4. The Road Closure Sign Assembly shall consist of R11-2 or R11-4 and XM4-10(R or L) signs.
- 5. Type B construction warning lights shall be used with all signs located on barricades. Type A construction warning lights shall be used on all other construction signs.

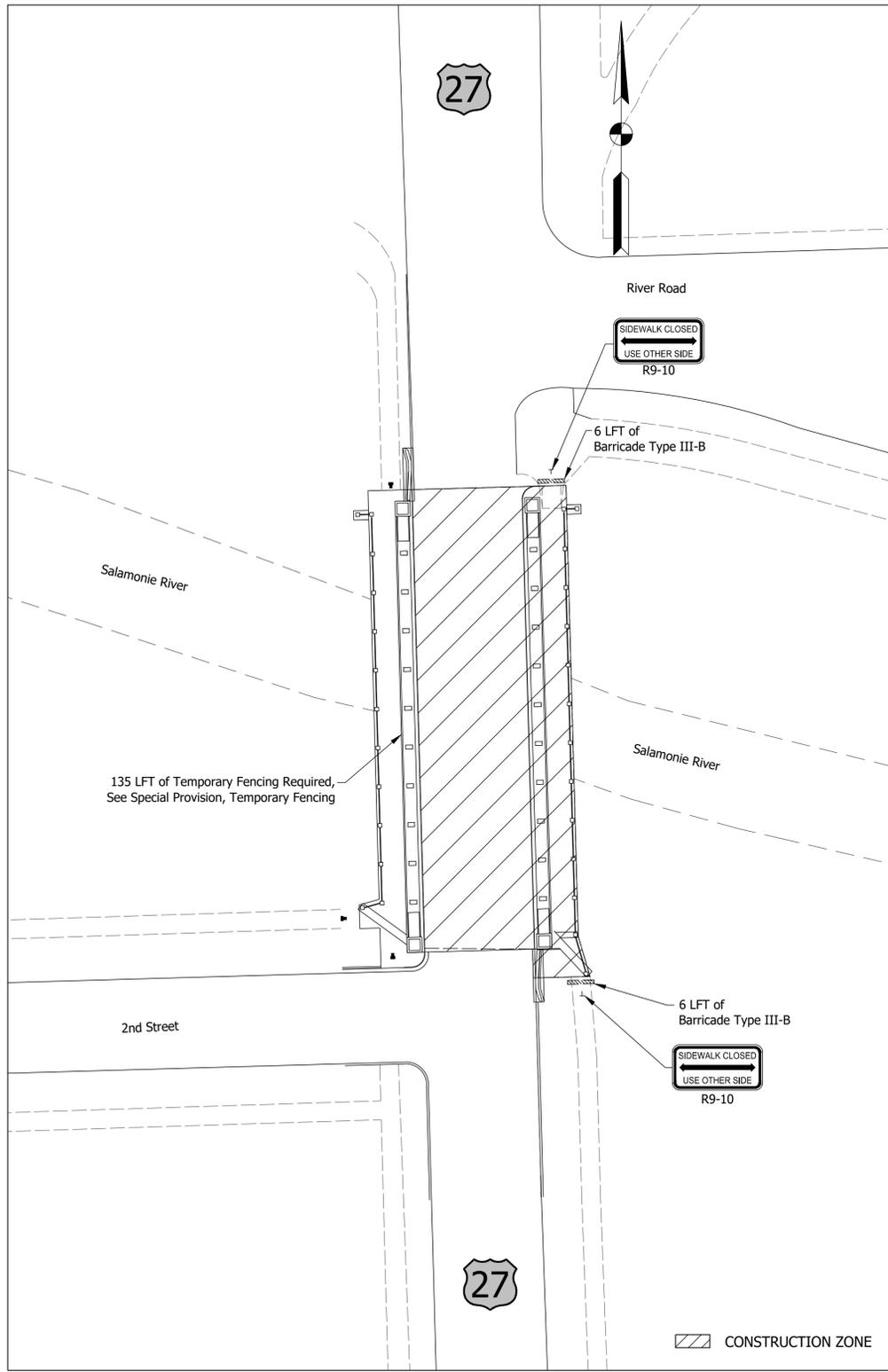


RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	HORIZONTAL SCALE 1" = 500'	BRIDGE FILE 027-38-06182 C
	VERTICAL SCALE N/A	DESIGNATION 1702940
DESIGNED: _____ MDV _____ DRAWN: _____ NCG _____	SURVEY BOOK N/A	SHEETS 4 of 7
CHECKED: _____ BKA _____ CHECKED: _____ JHP _____	CONTRACT RS-40592	PROJECT 027-38-06182 C
INDIANA DEPARTMENT OF TRANSPORTATION MAINTENANCE OF TRAFFIC		

Date: Apr 20, 2020, 4:52pm, User: Names: NCG, File: S:_L_20181218-06212318\Bridges\201806212318\MOT_Sidewalk_218062-2318.dwg



SIDEWALK CLOSURE PLAN PHASE 1
Scale 1" = 20'-0"



SIDEWALK CLOSURE PLAN PHASE 2
Scale 1" = 20'-0"

Quantities for Sidewalk Closure	
Construction Sign, B	3 Ea.
Barricade Type III-B	18 Lft.
Temporary Fencing	135 Lft.

GENERAL MOT NOTES

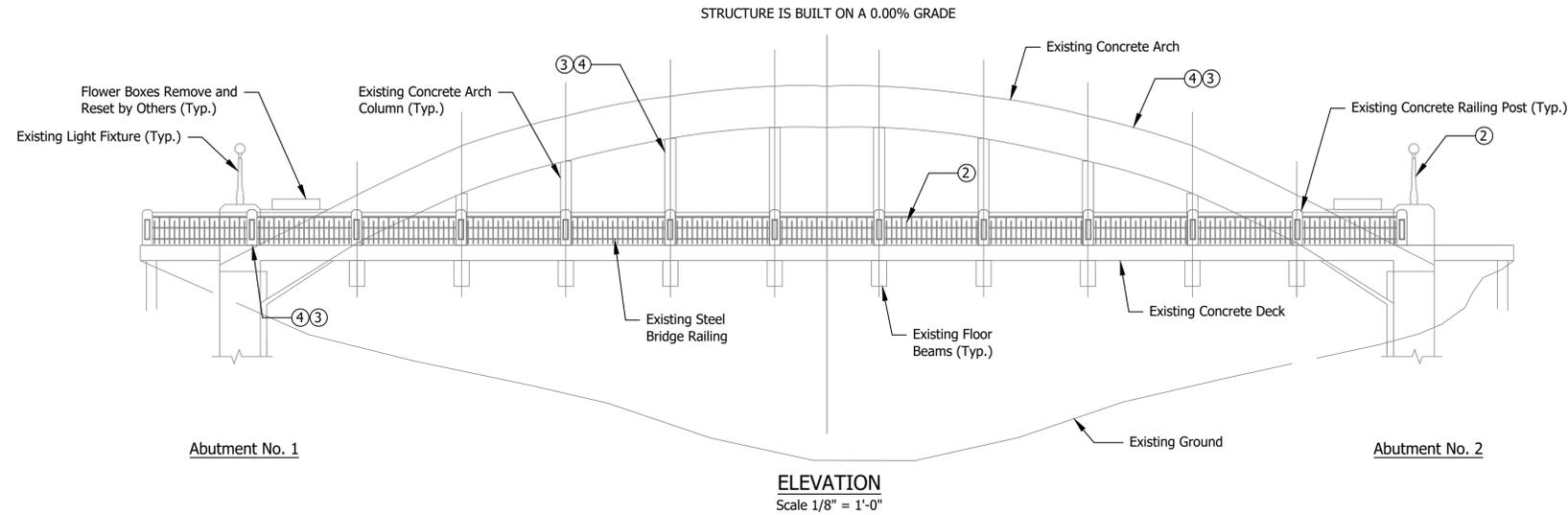
1. Sidewalk construction shall only take place on one side of the road at a time. A route for pedestrian traffic shall be maintained at all times. See Special Provisions, Sidewalk Maintenance of Traffic.

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: JHP	DRAWN: NCG	
CHECKED: KMS	CHECKED: JHP	

INDIANA
DEPARTMENT OF TRANSPORTATION

SIDEWALK MAINTENANCE OF TRAFFIC

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	027-38-06182 C
VERTICAL SCALE	DESIGNATION
N/A	1702940
SURVEY BOOK	SHEETS
N/A	5 of 7
CONTRACT	PROJECT
RS-40592	027-38-06182 C

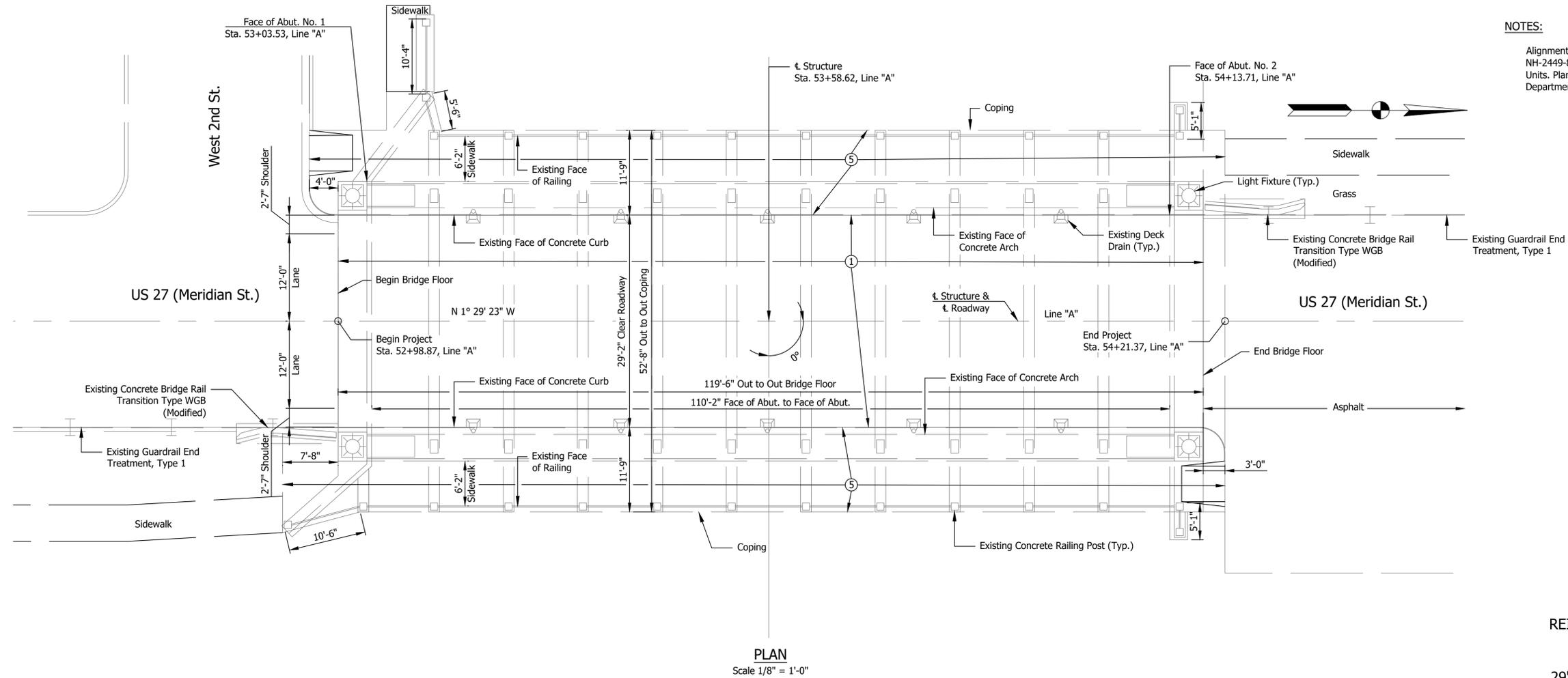


LEGEND

- ① Remove existing thin deck overlay. Prepare the deck surface with partial depth patching and steel shot blasting prior to placing polymeric concrete bridge deck overlay. Depth of patch shall not exceed thickness of cast-in-place concrete deck. The precast concrete deck panel shall not be disturbed. Apply polymeric concrete bridge deck overlay.
- ② Remove existing steel railing components and light fixtures. Completely remove existing paint system. Shop galvanize and powder coat steel components in a black matte finish. Reinstall steel components with new steel hardware. See Special Provision, Power Coating Steel Railing.
- ③ Clean the existing arch, arch columns and concrete portion of the railing. If these structural elements are in poor aesthetic condition after cleaning, and only if directed by the Engineer, remove the existing coating and apply a new concrete surface coating. See Special Provision, Repair Existing Structure.
- ④ Patch deteriorated concrete on arch, arch columns and concrete portion of the railing, as directed by the Engineer.
- ⑤ Surface seal the surface of the sidewalk, curbs and face of curbs with a PCC Sealer/Healer coating. See Special Provision, Surface Seal.
- ⑥ Clean deck drains.

NOTES:

Alignment and stationing information taken from Project No. NH-2449-8(5), dated 1996, and were converted to English Units. Plans are on file in the Central Office of the Indiana Department of Transportation and are available upon request.



REINFORCED CONCRETE THROUGH ARCH BRIDGE
1 CLEAR SPAN: 110'-2"
29'-2" CLEAR ROADWAY; NO SKEW
US 27 OVER SALAMONIE RIVER
JAY COUNTY

Date: Apr 20, 2020, 4:53pm, User: Names: NCGover, File: S:_L_2018\1218-062\238\Bridges\240\Misc\Drawings\General Plan_2180062-238.dwg

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: JHP	DRAWN: NCG	
CHECKED: KMS	CHECKED: JHP	

INDIANA DEPARTMENT OF TRANSPORTATION	
GENERAL PLAN	

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	027-38-06182 C
VERTICAL SCALE	DESIGNATION
AS NOTED	1702940
SURVEY BOOK	SHEETS
N/A	6 of 7
CONTRACT	PROJECT
RS-40592	027-38-06182 C

EXISTING STRUCTURE

The existing structure is a single span through arch bridge built in 1914 and reconstructed in 1997 with a 110'-2" clear span and 29'-2" clear roadway. Plans for the existing structure are on file at the Indiana Department of Transportation as Bridge File 027-38-06182 A and B, and are available upon request.

DESIGN DATA

Live Load: Originally designed for HS 20-44 loading in accordance with 1995 AASHTO Specifications.

Dead Load: Originally designed for actual weight plus 35 lbs/sft for future wearing surface.

GENERAL NOTES

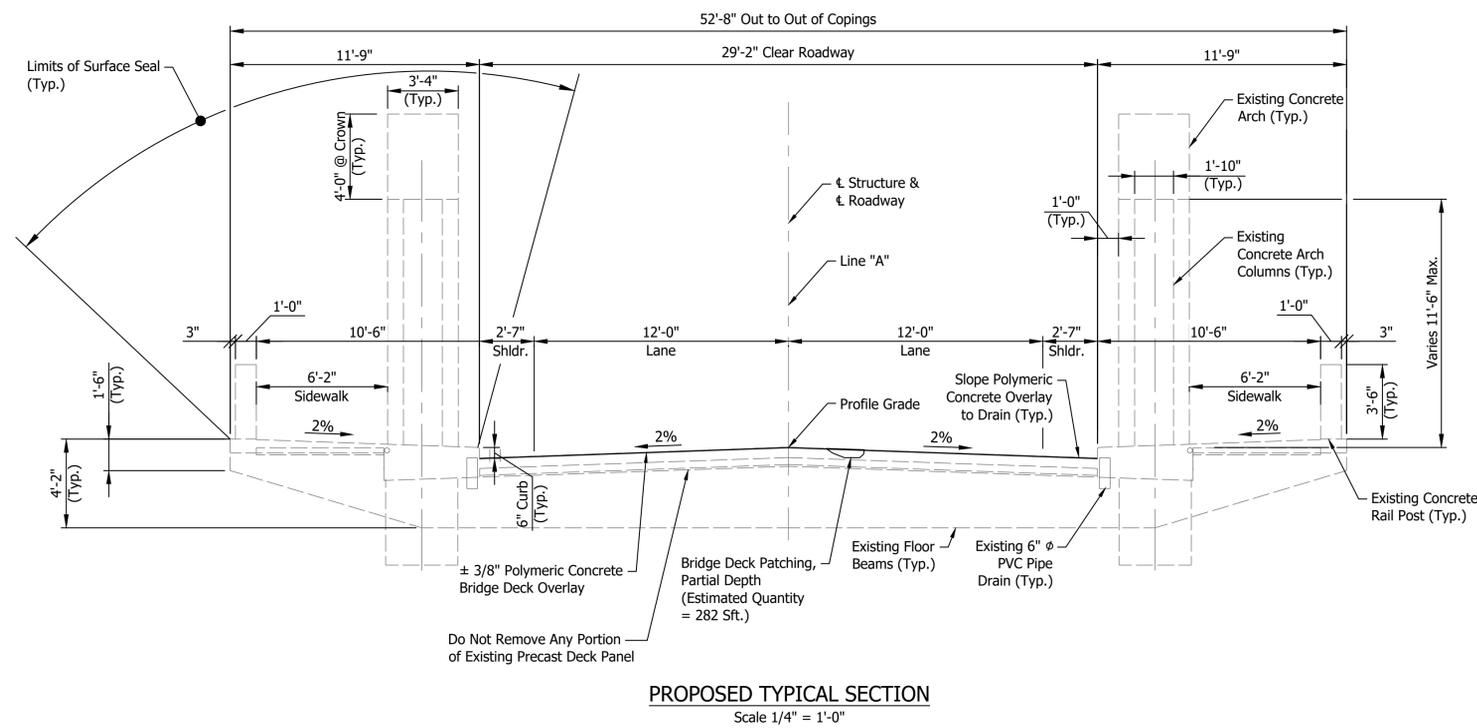
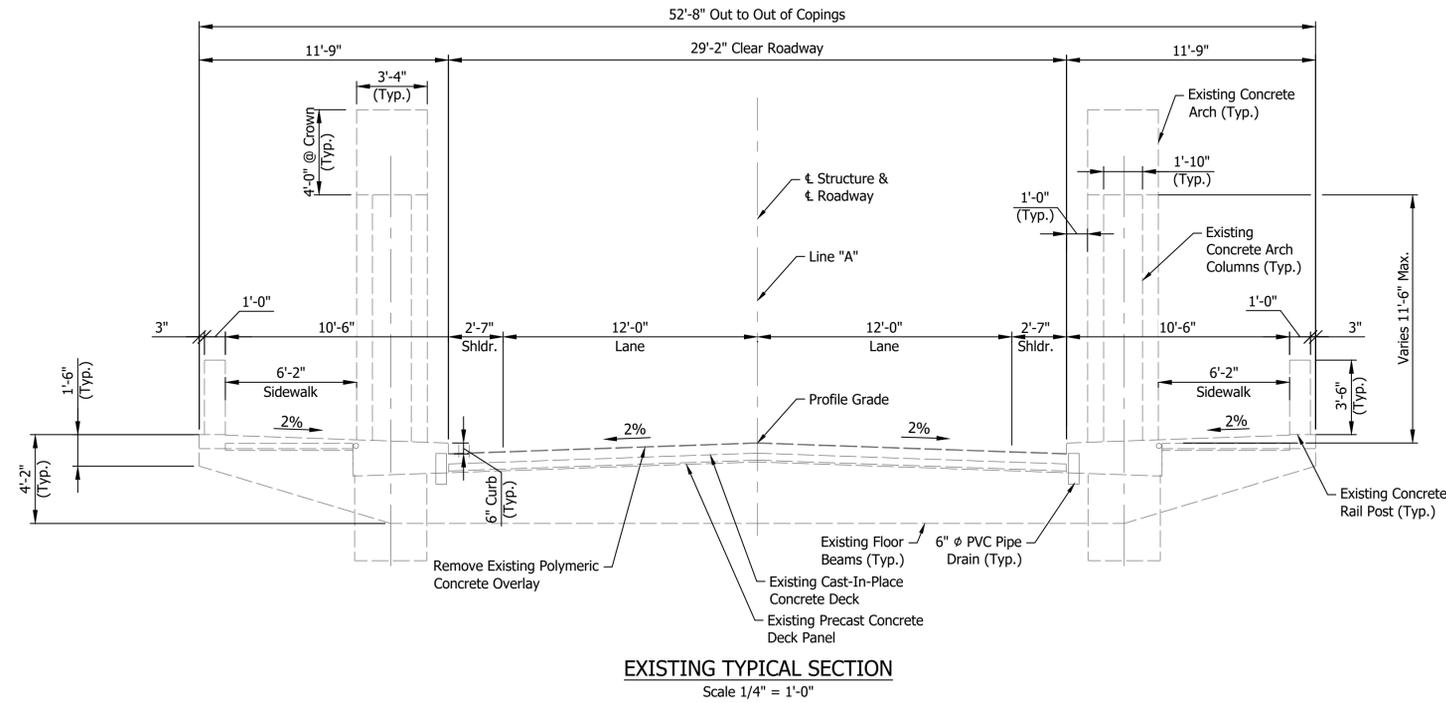
Where new work is to be fitted to old work, the Contractor shall check all dimensions and conditions in the field, report any errors or discrepancies to the Engineer and assume responsibility for their correctness and the fit of the new part to the old.

MATERIALS

Surface Seal to be PCC Sealer/Healer per Special Provision, Surface Seal.

Polymeric Concrete Bridge Deck Overlay (3/8" thickness) shall be applied to the areas shown on the plans.

Patching Concrete Structures shall be microsilica concrete mix per Special Provision, Patching Concrete Structures.



REINFORCED CONCRETE THROUGH ARCH BRIDGE
 1 CLEAR SPAN: 110'-2"
 29'-2" CLEAR ROADWAY; NO SKEW
 US 27 OVER SALAMONIE RIVER
 JAY COUNTY

Date: Apr 20, 2020, 4:54pm, User: Names: NCGover, File: S:_2018\1218-062\238\Bridges\240\Misc\Copings\General Plan_2180062-238.dwg

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: JHP	DRAWN: NCG	
CHECKED: KMS	CHECKED: JHP	

INDIANA DEPARTMENT OF TRANSPORTATION	
GENERAL PLAN	

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	027-38-06182 C
VERTICAL SCALE	DESIGNATION
AS NOTED	1702940
SURVEY BOOK	SHEETS
N/A	7 of 7
CONTRACT	PROJECT
RS-40592	027-38-06182 C